

Chicagoand Bicycle Federation



how it meets water quality standards. Sellers and landlords must disclose lead-based paint to buyers or requires reasonable certainty of no harm that must be applied to all pesticides used on foods. 1997 EPA

# FUTURE CHALLENGES

The U.S. has achieved remarkable improvements in environmental quality over the past 30 years. This success is largely due to strong environmental laws that have evolved over time, and the coordinated efforts of EPA and its many partners. As the character of environmental degradation and pollution has changed, so too have EPA's approaches. Today, challenging "second generation" issues such as urban sprawl, nonpoint source pollution and global climate change require more integrated, collaborative and innovative strategies. EPA continues to develop new ways of doing business to address these issues more effectively.

Having a Denver office allows EPA Region 8 to tailor its work to the unique circumstances of our six states. Region 8's states are landlocked, mostly arid and predominantly rural. Here, abundant public lands and natural resources support agricultural and extractive industries, as well as strong recreational and tourism-based economies. Growth is also a dominant theme. Between 1990 and 2000, one million new residents moved into Region 8 and over 1.5 million more are expected by 2010.

In approaching the environmental impacts related to these circumstances, Region 8 employs a variety of initiatives and voluntary programs that focus on developing partnerships, increasing compliance,

enhancing agency performance and addressing specific issues such as agriculture and mining.

## ***Sustainable Development***

EPA recognizes sustainable development as the touchstone for environmental protection. The term sustainable development means "to meet the needs of the present without compromising the ability of future generations to meet their own needs." A sustainable United States will have a growing economy, opportunities for satisfying livelihoods and a high quality of life for generations to come.

Region 8 is highly innovative in promoting sustainable development. For example, Region 8 and the Denver regional office of the U.S. Department of Energy signed a framework agreement in 1999 to promote and jointly market energy efficiency, renewable energy and environmental technologies. This collaboration will boost resource efficiency, improve customer service and send a stronger, more consistent message to the public about the benefits of clean energy.

EPA also uses Sustainable Development Challenge Grants to support state, local and community-based initiatives. Region 8 received over 40 grant applications in 1998, and allocated some \$328,000. Six projects were funded in 1999 for a total of \$366,000. Many grants

support projects directly related to growth and development issues, including rewriting zoning rules in flood-prone areas of North Dakota, and assessing land-use patterns using satellite imagery in Colorado's Big Thompson watershed.

Region 8 also hosts workshops and delivers presentations, training and technical support to many organizations. For example, Region 8 staff supported the design of green building standards for the redevelopment of the former Denver Stapleton Airport property. In 1999, the Malaysian government requested staff expertise in designing an environmental auditing program for its industrial sector. The Region also delivered a week-long series of sustainable development workshops at the 1999 Bi-national Commission meeting of the U.S.-Mexico Border 21 program in Ensenada, Mexico.

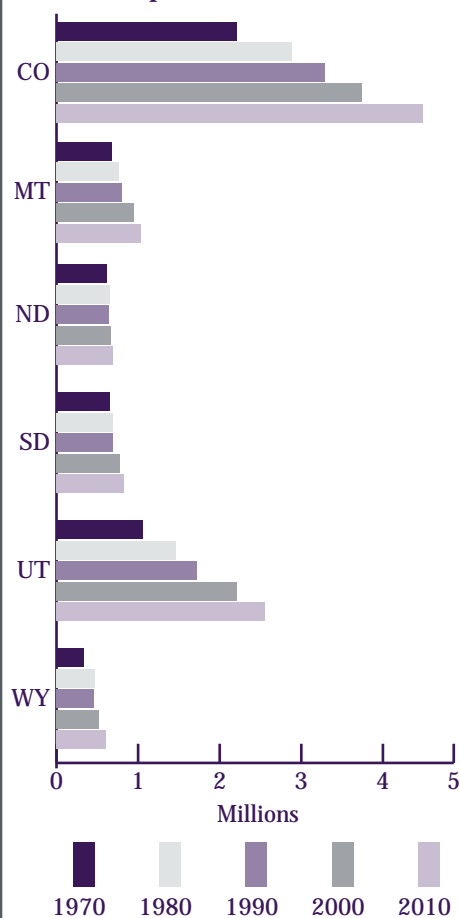
### Agriculture

Agriculture, including crop and livestock production, is one of the most important economic sectors in Region 8. It is also the leading cause of water quality problems in our states. Polluted runoff from cropland, the misuse of pesticides, and poor grazing practices are among the most widespread concerns associated with agricultural activities.

Recognizing that the participation of agricultural interests is vital to future environmental progress, Region 8 recently established improving relationships with the agricultural community as its highest priority. To ensure an



Historical and Projected Population Growth



integrated, effective response to critical issues, Region 8 recently established an Agricultural Advisory Team (AAT). The AAT has developed working relationships with key stakeholders including our State Departments of Agriculture, State Farm Bureaus and other agricultural groups. Semi-annual Agriculture Partnership meetings foster understanding and a coordinated approach to problem-solving, often



*Agriculture, including crop production and grazing, dominates much of Region 8's land area. EPA is working in partnership with the agriculture community to minimize the environmental impacts of these activities.*

resulting in a commitment to action. The team also sponsors a speakers series, provides program support and advises staff on various issues. Priority areas include animal feedlots, pesticide risk reduction, sustainable agricultural practices, water issues, genetic engineering, communications and partnerships.

### **Mining**

Addressing the environmental impacts of past mining activities is an enormous challenge. There are

### **Envision Utah: Partnering for Quality Growth**

Utah's strong economy, high quality of life and environment have contributed to a growth rate twice the national average and a total population above 2 million and rising. In 1997, this unprecedented growth spurred the emergence of a public/private partnership process called Envision Utah. This process is designed to guide businesses, residents and governments in growth management and land-use policies based on a shared vision, a "Preferred Growth Strategy." Envision Utah has conducted 70+ public meetings and surveys of 17,000+ families that generated data on demographic, economic and environmental conditions along the Wasatch Front. This information, plus several demonstration projects, will inform communities, businesses and governments about their options for the future. EPA has supported this initiative since 1998.

### **Past Producer Hard-Rock Mining Sites**

Watershed and National Rank		# of Sites
#2	Clear Creek, CO	1,343
#3	Upper Dolores, CO-UT	875
#4	Arkansas Headwaters, CO	724
#6	St. Vrain, CO	676
#7	Upper Arkansas, CO	578
#8	San Miguel, CO	519
#14	Lower Dolores, CO-UT	350
#15	Upper Missouri, MT	329

Source: U.S. Geological Survey

*Watersheds in Region 8 rank among the highest in terms of numbers of abandoned hard-rock mines.*

over 13,000 abandoned hard-rock mine sites in Region 8, and many continue to threaten human and ecosystem health. Runoff from exposed rock and leaching piles can carry heavy metals and toxics into nearby rivers and streams, acidifying and poisoning large areas of water. In some areas, native fish and animal populations have been severely impacted, requiring extensive cleanup efforts. Restoring water quality and soils in severely polluted areas is a priority. Region 8's efforts build on national and regional initiatives to develop multi-media and multi-statute approaches to managing abandoned and active mines.

Over half of Region 8's most serious hazardous waste sites -- those on the Superfund National Priority List (NPL) -- are abandoned mines or processing facilities, and many new and proposed NPL sites are related to mining. The Region has made considerable progress at these sites. Through Superfund, for example, wastewater treatment plants now manage discharges from

the worst abandoned mine sites. Region 8 also is working to ensure that current mining operations provide adequate measures for protecting the environment.

Mine waste issues are also addressed through community-based partnerships, watershed approaches and information technology tools such as geographic information systems (GIS). Region 8's mining team helps coordinate these activities, focuses on emerging mining-related environmental issues, and aids the enforcement team in employing a sector-based approach to promote environmental compliance.

### **Environmental Justice**

The Environmental Justice (EJ) program evolved from the idea of "environmental equity" -- a concept that began gaining momentum in the mid-1980s. The basis of EJ is that no community

### **Restoring Buffalo in Indian Country**

The InterTribal Bison Cooperative in South Dakota received a 1998 Challenge Grant to restore the American Buffalo to its 49 member-tribes' reservations. In addition to benefiting the Great Plains environment and creating an economic development opportunity for the tribes, this initiative represents an opportunity for cultural revitalization. Restoring the buffalo nation represents a return to the traditional way of life, a holistic approach that balances environmental integrity with a strong local economy.



should be forced to bear a disproportionate share of environmental impacts. An Executive Order signed by President Clinton in February 1994 required federal agencies to incorporate environmental justice considerations into decision-making, "to the maximum extent practical and permitted by law."

Region 8 established an EJ program in 1995 with the goal of incorporating EJ considerations into EPA program work. Now in its sixth year, the EJ program has conducted over 30 EJ training

workshops, and has provided program guidance and consultation services to state and federal agency counterparts. The EJ program also provides communities educational and financial assistance in identifying and addressing local environmental problems. From 1994-1999, the program has provided 94 grants totaling \$2.7 million to local governments, colleges and universities, nonprofit organizations and religious institutions. Tribes have received 39 grants totaling over \$1 million.

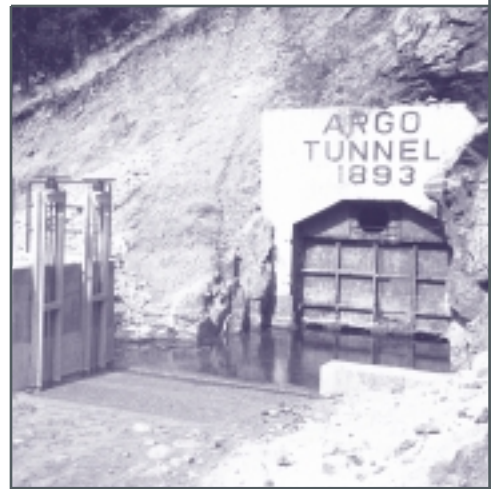
### **Compliance Assistance**

In the past decade, compliance assistance has emerged as an effective tool in helping the regulated community meet and exceed environmental requirements. Although EPA will always vigorously pursue those who violate environmental laws, providing brochures, manuals, training, outreach, and technical assistance to industry can significantly increase voluntary compliance. In 1999, for example, EPA opened four new Compliance Assistance Centers for the paints and coatings industry, transportation industry, small and medium-sized chemical manufacturers, and local governments. There are now a total of nine compliance centers online, which receive an average of 750 website hits per day. In addition to the centers, EPA's other compliance assistance efforts reached approximately 330,000 entities through on-site visits, hotlines, workshops, training and distribution of checklists and guides in 1999 alone.

### **The Food Quality Protection Act**

In 1996, Congress passed the Food Quality Protection Act (FQPA) -- a law that fundamentally changes the way EPA regulates pesticides. The FQPA mandates a single, health-based standard for all pesticides in all foods. It provides special protections for children, expedites the approval of safer pesticides, and requires the re-evaluation of pesticide registrations and tolerances.

EPA is reviewing 9,700 pesticide residue tolerances to ensure they meet new, more stringent standards and are protective of children. This massive effort is focusing on the highest-risk pesticides first. As of August 1999, EPA had reviewed the first third of tolerances. Over the next fourteen months, EPA will also be reviewing the 36 remaining organophosphate pesticides, including Dursban, Diazinon and Malathion.



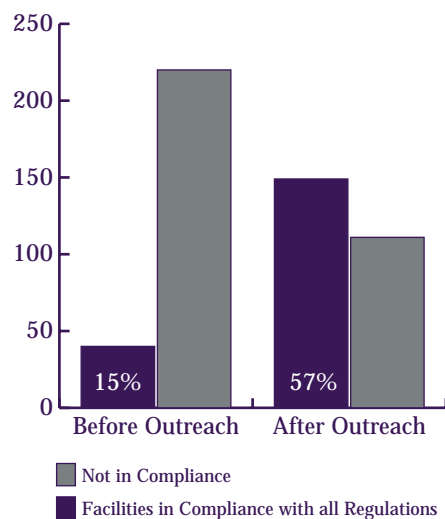
*Pollution from abandoned mining sites is a big water quality problem in parts of Region 8. EPA's Superfund and Community-Based Environmental Protection programs have been working in the mine-impacted Clear Creek Watershed since the early 1990s. Clear Creek, a popular recreational attraction, also provides drinking water to over 300,000 people. For years, the Argo Tunnel (top), a mine waste conduit, contributed nearly 1,500 pounds of metals per day into the creek. In 1998, EPA and the State of Colorado funded the construction of the Argo treatment plant (bottom), which now eliminates 99% of the metals in the acidic mine water.*



**Nationally, 650 Superfund or half of all site cleanups are completed. The Environmental Science Center opens friendly climate control system. Radon testing is required to buy a home in most states. Occupants living in**

Region 8's recent initiative in the dry cleaning sector is just one example of a compliance assistance success. EPA made the review of dry cleaning operations and their use of tetrachloroethylene ("perc" or PCE) a priority in the 1990s. "Perc", a toxic solvent commonly used by dry cleaners, is suspected of causing cancer in humans. Region 8's strategy focused on identifying dry cleaner sources, increasing awareness of regulations among owners and operators, and encouraging the adoption of voluntary pollution prevention measures. EPA, state agencies and small business programs did extensive work to conduct inspections and assess initial compliance. Subsequent assistance

### Improving Compliance in the Dry Cleaning Industry



*Region 8's outreach and assistance efforts with dry cleaning operations increased compliance by 42%, in large part due to the purchase of cleaner machines. In addition, operator's pollution prevention initiatives reduced perc emissions by about 33 tons.*

yielded impressive compliance increases and reductions in perc emissions.

### Closing Thoughts

Nationally and regionally, we have achieved significant improvements in the quality of the air we breathe, the water we swim in and drink, and the places we live. Though few may remember when air quality violations and raw sewage spills were common occurrences, our environment is in far better shape today than a few decades ago.

It is notable that EPA's laws and programs are working in harmony with economic prosperity. Nationally, our population grew 31% and our Gross Domestic Product 130% from 1970-1997. At the same time, air emissions have dropped by nearly 30%, 40% more surface waters are fishable and swimmable, and toxic releases are down over 40%. It has become clear that economic and social health are linked with a healthy environment. Nowhere is this more evident than in Region 8, where environmental assets are a driving force behind economic growth and diversification.

Despite major progress, many challenges remain. The impacts of diffuse, nonpoint sources of pollution remain a stubborn threat to air and water quality, and ecosystem health. Data tell us that children, despite general progress, are still exposed to significant health risks from air pollution and toxics. Many of our rivers and lakes are still not clean enough for swimming. Environmental

conditions on tribal lands are often far behind those in the rest of the nation.

Maintaining and furthering environmental gains is not EPA's job alone. EPA partners with state and federal agencies, local governments, tribes, community groups, environmental organizations, private industry and individuals to achieve shared environmental goals. Today, for example, states are doing more than ever to protect public health and the environment. Tribal governments and local communities are also contributing to progress. EPA recognizes that fulfilling its mission depends on working effectively with these partners. Only together can we hope to achieve Region 8's vision of a clean, healthy environment for future generations, where all people care about the environment and act to sustain its integrity.



*Regional Administrator Bill Yellowtail discussing environmental project work with local officials in San Miguel County, Colorado.*